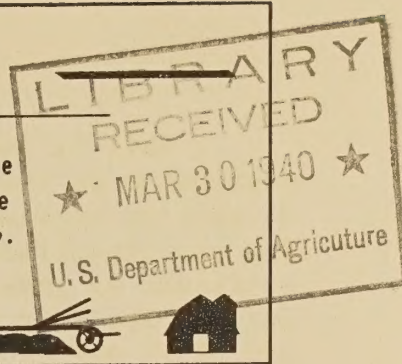


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news letter

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Vol. 1.

March, 1940

No. 9

GENERAL ADMINISTRATION

Dr. Knight with Dr. Herrick and Dr. Wells, Director of the Eastern Regional Laboratory for Utilization of Farm Products, discussed in New York City on March 2 with the Directors of the Northeastern Experiment Stations the projects to be undertaken at the Eastern Regional Laboratory.

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Initial arrangements, including the purchase of necessary filing equipment and supplies, are under way to install the Bureau filing system in the Northern and Eastern Regional Laboratories.

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Henry A. Donovan, Assistant to the Chief, made an inspection of office procedures at the Urbana Soybean Industrial Products Laboratory of the Industrial Farm Products Research Division at Urbana, Ill., Tuesday March 12. While in Urbana, Mr. Donovan also contacted Thayer Cleaver of the Farm Structures Research Division and had opportunity to look into the facilities available for this work of the Bureau which is housed in the Agricultural Engineering Building of the University of Illinois. At Peoria, Ill., Mr. Donovan made arrangements for the conduct of the business operations of the Northern Regional Laboratory for the Utilization of Farm Products during the absence of Miss Mohagen, Assistant Business Manager, who is to undergo an operation and will be in the hospital for several weeks. Henry M. Johns, Administrative Assistant in the Business Administration Office in Washington, has been sent to Peoria to assume responsibility for the business management functions of the laboratory during the temporary absence of Miss Mohagen.

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The Senate Committee on Appropriations reported out the Agricultural Appropriation Bill on March 9. House reductions affecting this Bureau were restored as follows: Agricultural Byproducts Laboratory, Ames, Iowa, \$45,100; Dust Explosion and Fire Prevention, \$30,000; Garage and Workshop at Auburn, Ala., \$10,000; and repairs to Naval Stores Station, Olustee, Fla. \$4,000. It is expected that the Appropriation Bill will be taken up on the floor of the Senate immediately following the current debate on the extension of the Hatch Political Activities Act.

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Gail C. Kuhn has recently been appointed Classification Investigator in the Division of Business Administration of the Bureau. He will be engaged in conducting fact-finding investigations concerning the classification of positions, including desk studies of individual positions of groups of positions. Prior to his appointment with the Bureau, Mr. Kuhn was employed as Junior Classification Investigator in the Civil Aeronautics Authority since January, 1939, having transferred to that organization from the personnel office of the Soil Conservation Service.

During March S. H. McCrory, went to Denver, Colo. for a conference regarding studies of the storage losses of sugar beets. From there he went to Hays, Kansas, for a conference with Director Archer and W. R. Swanson of the Farm Structures Research Division regarding grain storage work. He next visited the Cotton Ginning Laboratory at Leland, Miss. and conferred with Chas. A. Bennett and at Laurel, Miss. he inspected the work being carried on by J. W. Randolph on the preservation of sweet-potatoes for farm feed. He conferred with R. M. Merrill at Auburn, Ala. regarding the farm tillage machinery studies and with O. A. Brown at Irwinville, Ga., in regard to rural electrification research work.

"The Role of Refugees in the History of American Science", by Dr. C. A. Browne, Advisor in Chemical Research of this Bureau is the leading article in Science for March 1. It is an interesting account of the contributions made to American scientific advancement by men who came to America from Europe to escape persecution or curtailment of political liberties.

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CARBOHYDRATE RESEARCH

M. A. McCalip, who is in charge of the Baton Rouge, La., field station, spent the month of February at Manopla, Cuba, on annual leave in connection with some special work with the Caribbean Sugar Company. He stopped in Washington late in January on his way to Cuba.

The office of the Commissioner of Agriculture, State of Alabama, has contributed the services of a chemist for sugarcane and sorgho sirup investigations at the Auburn, Ala., field station, in cooperation with W. T. Schreiber who is in charge of that station. The Department of Chemistry, Alabama Polytechnic Institute, has contributed part time services of a graduate student to assist in this work.

Industrial interests in Italy are planning erection of a sweet-potato starch factory based on the work of this Division, and have proposed that a member of the Division go to Italy to supervise its erection and initial operation or, as an alternative, that an Italian engineer come to the United States in order to obtain all necessary information. Most of the starch consumed in Italy is white potato starch, part of which is imported and part of which is manufactured in that country. White

potatoes deteriorate under Italian conditions and it is necessary constantly to bring in new seed stock from more northern countries such as Holland and Germany. On the other hand, the sweetpotato is well adapted to cultural and environmental conditions in Italy. Plantings of high starch content sweetpotato varieties obtained from the United States are being made in central and southern Italy and in northern Africa.

G. P. Walton, who is in charge of honey investigations, addressed the Maryland State Beekeepers' Association, Hagerstown, Maryland, at a recent meeting.

Industrial interests at Auckland, New Zealand, are planning the erection of a sweetpotato starch factory based on the work of this Division, and have requested use of the process to cover the Dominion of New Zealand, Commonwealth of Australia, and the British Pacific Islands. They are contemplating production of starch from the New Zealand Kumara (Maori) sweetpotato.

A. F. Freeman has been placed in charge of the Bogalusa, La., Tung Oil Laboratory which serves the tung oil industry in the States of Texas, Louisiana and Mississippi. The Alabama, Georgia, and Florida tung area is served directly by the Gainesville, Fla., Tung Oil Laboratory.

The Laurel, Miss., sweetpotato starch factory discontinued operation for the season of 1939-40 on January 10. Production for the season was 2,700,000 pounds of starch, most of which has been sold.

Among recent visitors to the Division were Messrs. Fred W. Hoover, in charge of Development Dept., Commonwealth and Southern Corp., New York City; Fred P. Abbott, Assistant General Agricultural Agent, Seaboard Air Line Ry., Savannah, Ga.; Ivan C. Miller, "Food Industries", New York City; J. N. McBride, General Agricultural Agent, Seaboard Air Line Railway, Savannah, Ga.; J. F. Jackson, General Agricultural Agent, Central of Georgia R.R., Savannah, Ga.; J. C. Bennett, Agricultural Agent, Seaboard Air Line Ry., Hamlet, N.C.; Cecil Lamont, Secretary, Alberta-Pacific Grain Co., Ltd., Winnipeg, Man.; Dr. J. E. A. den Doop, Agricultural Adviser, "Anglo-Dutch Plantations of Java, Ltd.," Bandoeng, Java; Wm. L. Pier, Vice President, Fort Worth National Bank, Fort Worth, Tex.; Poole Maynard, Industrial Agent, Atlanta, Birmingham & Coast R.R., Atlanta, Ga.; F. Berry Smith, Chief Chemist, J. C. Hutton Corp., Brisbane, Australia; William Holden, General Manager, Fort Worth Chamber of Commerce, Fort Worth Texas; S. C. Roberts, Assistant General Industrial Agent, Seaboard Air Line Ry., Norfolk, Va.; Joseph R. Maxwell, Chemist, Stephen F. Whitman & Son, Philadelphia, Pa.; J. J. Baker, Assistant Agricultural Agent, Norfolk & Western R.R., Roanoke, Va.; Kiyoshi Ui, Superintendent, Formosa Sugar Mfg. Co., Ltd., Kobe, Japan; F. M. Hicks, Vice President, Gulf, Mobile & Northern R.R., Mobile, Ala.; Herman Lebeson, President, National Syrup Co., Chicago, Ill. Dr. den Doop later accompanied H.S. Paine, Chief of the Division, to Laurel, Miss., to visit the sweetpotato starch factory.

Dr. Julian Miller, in charge Horticultural Research, Louisiana Experiment Station, who is cooperating with this Division in the breeding of sweetpotato varieties of higher starch content, announced recently that his best seedling L 4-5, in plots recently grown at St. Francisville, La., showed an average starch content of 29.5 percent. This is a considerable increase over the average starch content (23-24 percent) shown by the Triumph variety which is now grown for supplying the Laurel, Miss., starch factory. This result, if consistently maintained, would mean a 25 percent reduction in raw material cost of producing sweetpotato starch and would make the sweetpotato comparable with cassava as a starch producer. This would be a remarkable achievement, considering that 8 to 10 months are required in the tropics for producing a cassava crop, whereas a sweetpotato crop can be grown at a higher latitude in 5 months.

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In cooperation with the L. O. Crosby & Sons Naval Stores Co., a pilot tung oil solvent extraction plant is being erected at Picayune, Miss., for developing a solvent extraction process devised by members of the Division. Operation is expected to commence soon. The cost of the pilot plant is being borne by the company and the Division is contributing chemical and technological personnel and the facilities of the Bogalusa, La., Tung Oil Laboratory. In addition to solvent extraction of expeller press cake, the possibility of complete solvent extraction of tung nuts will be investigated. This latter possibility has necessitated a study of various types of grinding equipment. Several collateral problems will also be investigated, such as the most suitable technic for handling, assembling, and storing tung fruits at the oil mill, and the possibility of dehydrating the nuts prior to shipment as a means of reducing transportation cost and increasing the radius of supply, thus permitting operation of larger factory units with lower production cost per pound of oil.

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A. R. Eberle, Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, was detailed to the Division during February to assist in the analysis of a large number of sweetpotato samples representing cooperative work between the two divisions.

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Dr. W. Gordon Rose has been assigned to work at the Bogalusa, La., Tung Oil Laboratory during the last few months in connection with the design, construction, and operation of a pilot tung oil solvent extraction plant at Picayune, Miss., a few miles distant.

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M. D. Harman, Sirup Specialist, Extension Service, Alabama Polytechnic Institute, Auburn, Ala., paid his annual visit to the Division in March and discussed sugar cane and sorgho sirup problems with members of the Division and also with members of the Division of Sugar Plant Investigations, Bureau of Plant Industry.

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Howard Wascher, General Manager of the European starch factories of the Corn Products Refining Co., made a thorough inspection of the Laurel, Miss. sweetpotato starch factory recently and also made a visit

to Citronelle, Ala., and contiguous sweetpotato territory. At a dinner given him by the Citronelle Chamber of Commerce, Mr. Wascher announced the interest of the Corn Products Refining Co., in the possible erection of a large sweetpotato starch factory in Citronelle. Such a factory, Mr. Wascher said, would employ the process now in use at the Laurel, Miss. factory, which was designed by members of this Division and erected and operated under their supervision.

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The Division has supplied, from the Laurel, Miss., dehydration pilot plant, 30 tons of dehydrated sweetpotatoes to the West Tennessee (Jackson), Georgia (Experiment), and Alabama (Auburn) Agricultural Experiment Stations for 120-150 days' cattle feeding tests. These tests are being made in pursuance of the idea of using dehydrated sweetpotatoes as a carbohydrate feed for balancing cottonseed meal, peanut meal, etc., in a ration for developing the beef and dairy cattle industries in the South. Since corn yields in the South are low and the cost relatively high, and the high starch content sweetpotato varieties under the new agricultural methods recently introduced give the highest total carbohydrate yield per acre of any crop grown in the United States (excepting only sugarcane in Louisiana and Florida), it is proposed to substitute sweetpotatoes for corn, provided sufficiently cheap means of farm preservation can be devised. Such a development would parallel present corn use practice in the corn belt in that most of the crop is fed on the farm and the "overflow" is used for starch and derived products. In furtherance of this idea, Dr. F. H. Thurber of this Division and H. H. Hall of the Food Research Division have devised a low-cost "wet storage" method whereby ground sweetpotatoes have been stored for several months without spoilage or material loss of starch. Members of this Division at Laurel, Miss., in cooperation with J. W. Randolph, Division of Mechanical Equipment, have also designed a continuous press of new type by the aid of which it is hoped to grind, press and dehydrate sweetpotatoes at low cost. Such developments would make sweetpotatoes available throughout the year, both for feeding and for starch factory operation, and would permit larger starch factories with longer radius of raw material supply and lower unit production cost.

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Publications

- "Inulin and Hemicellulose in Nitrogen-Free Extract and Possible Importance of Hemicelluloses in Animal Nutrition" by E. Yanovsky, Journal A.O.A.C., Vol. 23, No. 1, pp. 131-37, February 1940.
- "Starch as a Constituent of Nitrogen-Free Extract" by F. H. Thurber, Journal A.O.A.C., Vol. 23, No. 1, pp. 126-31, February, 1940.

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FARM STRUCTURES RESEARCH

Wallace Ashby attended the Regional Extension Conference for Northeastern States at New York City on February 29, where he discussed revision of the Northeastern farm building plans.

On March 13 he presented a paper before the annual North Atlantic Regional Conference on Home Economics Education meeting at New York City on "Review of Housing Studies."

H. J. Barre presented a paper on corn storage at the March 14 meeting of the Association of Grain Growers at Kanawha, Iowa. He also discussed "Condensation of Moisture in Walls" before the Iowa Lumber Dealers Association at Council Bluffs on March 7.

Winter tests are under way in the experimental houses in Athens, Ga. A special type of return air duct has been installed in the three-room houses. This is intended to furnish better distribution of heat. Previous tests in these houses have covered various degrees of protection against air leakage and heat loss.

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FARM MECHANICAL EQUIPMENT RESEARCH

R. B. Gray left Washington March 13 for Laurel, Miss., where he conferred with J. W. Randolph relative to sweetpotato production and preservation equipment; later he spent several days with R. M. Merrill at Auburn, Ala., in connection with tillage machinery investigations.

G. A. Cumings left Washington February 28 on a trip to various points in Virginia, North Carolina, and South Carolina, where conferences were held in connection with the Bureau cooperative fertilizer placement studies. Mr. Cumings also visited the factories of several fertilizer distributor manufacturers to inspect improved machines and to discuss some of the practical problems pertaining to improved placement of fertilizer. Improved fertilizer-placement equipment is now available on some of the simple walking type distributors which is intended for the great number of cotton and tobacco growers who are unable to purchase the larger and more expensive machines.

S. W. McBirney reports that the damage caused by heavy rains and resulting floods in Northern California late in February and early in March affected sugar-beet growers along with others. Of the small percentage of the crop already planted it was estimated that about two-thirds was lost. Another 10,000 acres of the land contracted for sugar beets will not be planted because of flood damage or because it cannot be put in shape in time to plant beets. Around Davis the chief effect of the storm on sugar-beet growers was to further delay the already late planting.

Thirty-one of the thirty-two county weed supervisors of Utah attended a "Weed Short Course" given during February at the Utah State Agricultural College at Logan. The county supervisors were given a week's intensive training on weeds, including their eradication. E. M. Dieffenbach of this division spoke to the group on equipment and methods of weed eradication.

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Frank Irons reports the bait mixer for grasshopper control is about completed and will be ready for trial March 25 as planned. Drawings for the poison bait spreader have been prepared for use in making up this equipment.

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RURAL ELECTRIFICATION RESEARCH

Harry L. Garver attended a conference of rural electrification research workers at Birmingham, Ala., in February. While there he attended the conference of Southern Agricultural Workers and read a paper "The Rural Electrification Research Program of the Bureau as it Relates to the South", before the Southern Section, American Society of Agricultural Engineers.

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George W. Kable, Editor, "Electricity-on-the-Farm", formerly with the Tennessee Valley Authority, accompanied Mr. Garver to Irwinville, Ga., where they conferred with O. A. Brown of this Bureau and members of the Farm Security Administration regarding a rural electrification study being conducted at that place.

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W. Berkeley Grizzard has been appointed to fill the vacancy left by the resignation of Julian M. Fore, cooperating agent at Purdue University. Mr. Grizzard is a graduate of Virginia Polytechnic Institute and has been employed for some time by the Rural Service Department of the Virginia Electric Power Company. Mr. Fore resigned to take a position with the Tennessee Valley Authority.

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Alex Reinhold Rehrig has been given a temporary appointment as an agent at the University of Nebraska. He has been assigned the task of studying the possibility of lead poisoning of stock from drinking water heated with immersed soil heating cable.

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NAVAL STORES RESEARCH

C. F. Speh and Dr. S. Palkin were in Baltimore on March 8 to consult with chemists and engineers of the Industrial Chemical Company regarding pilot scale fractionating columns.

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W. D. Pohle attended the meetings of the Soap Committee of the American Society for Testing Materials in New York, N.Y., March 11 and 12. On March 13 he called on Dr. Decker of Camden, N.J. and representatives of Fels and Company, of Philadelphia, Pa. with reference to studies on the use of rosin in soap.

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Publications

Value of Covering Turpentine Cups, by Ray V. Lawrence,
Naval Stores Review, 49 (49); March 2, 1939.

Titre of Fatty Acids and Fatty Acid and Rosin Mixtures,
by W. D. Pohle, Soap, Vol. XVI, No. 3, p. 61, March 1940.

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INDUSTRIAL FARM PRODUCTS RESEARCH

Dr. G. H. Brother, senior chemist in charge of research on soybean meal at the U. S. Regional Soybean Industrial Products Laboratory, attended the meeting of Committee D-20 on Plastics of the American Society for Testing Materials February 28 and 29 in Washington, D. C.

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D. H. Wheeler, senior chemist of the Soybean Laboratory, attended the joint meeting of the Finished Materials Standards Committee and Oil Trading Rules Committee of the National Soybean Processors Association in Chicago on February 29.

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Plans are being made for the annual meeting of the collaborators of the Soybean Laboratory. This group, made up of one representative from each of the Agricultural Experiment Stations of the 12 North Central States, will meet on April 22-23 with members of the Bureaus of Agricultural Chemistry and Engineering and Plant Industry and members of the research staff of the Soybean Laboratory. The work of the laboratory during the past year will be reviewed, and the research program for the coming year discussed.

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Doctors H. T. Herrick and O.E. May of the Regional Laboratories visited the Agricultural By-Products Laboratory at Ames, Iowa, on February 15, and 16.

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Dr. S. O. Aronovsky, Acting Chief of the Agricultural Byproducts Laboratory attended the National Technical Association of Paper and Pulp Institute Meeting in New York City on February 19 to 22, and visited a number of plastics laboratories in the vicinity of New York. He spent the 26th to the 29th of February in Washington, D. C., following which he visited a number of plastics plants and laboratories in Detroit and Chicago, and also the Regional Soybean Laboratory at Urbana, Ill. T. F. Clark of the Agricultural By-Products Laboratory met Dr. Aronovsky in Detroit on March 1 and accompanied him to Chicago and Urbana. Dr. Aronovsky and Mr. Clark returned to the Agricultural By-Products Laboratory on March 6.

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A group of men attending a short course at Iowa State College visited the Agricultural By-Products Laboratory at Ames on March 6.

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DIVISION OF PLANS AND SERVICE

The design of the film storage vault to be built at the Beltsville Research Center which has been in progress during the past month, has been entirely completed and transmitted to the field for construction purposes. The purchase of material, laying off of the ground and actual construction has commenced. It is estimated that the vault will be completed prior to the end of the fiscal year at which time the services now in use at Abingdon, Va., here in the Department, and in remotely situated localities will be centered under a single roof, thus increasing the efficiency of the photographic services of the Department.

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Recent meetings have been held by the Secretary's Office for the purpose of discussing tentative layouts for a new photographic and cartographic laboratory which will be located at the Beltsville Research Center. Space requirements have been presented by various Bureaus who anticipate using this laboratory and tentative floor space has been established. While the design has not yet crystallized, it appears that the laboratory will be a 3- or 4-story affair, having a net floor space of approximately 31,600 square feet per floor. The building may be of the windowless type. If a windowless structure is built it will be of unique design, completely air conditioned for comfort and also for special conditions. Lighting will probably be through the use of the ultra-modern fluorescent type lights.

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A solvent storage building has been authorized for construction at the Beltsville Research Center to house inflammable and highly combustible materials. This unit is to be a small simple brick structure, designed to harmonize with the surrounding buildings at the Research Center. The building has a single room divided into five cribs by the use of metal screened partitions and space will be assigned to different Bureaus working in the adjacent buildings. The design project is completed and construction will be started immediately. The project should be finished during this fiscal year.

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The elevator specifications for the passenger and freight elevators to be installed in the Departmental Laboratories located at the Beltsville Research Center are complete and have been forwarded to the Division of Purchase, Sales, and Traffic where they will be submitted to prospective bidders.

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The Division is preparing plans and specifications for the laboratory equipment to be installed at the Beltsville Research Center. Preliminary reviews have been made by various equipment manufacturers for the purpose of securing constructive guidance relative to the very latest

designs available on open market purchase. The equipment specifications are intended to be submitted for bidding purposes and contracts awarded during this present fiscal year.

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The tentative design of the special low temperature refrigeration system for use in the Western Regional Laboratory incorporates the use of two stage Freon compressors adequately sized to lower the temperature in the refrigerated rooms to at least -45° F. under actual working conditions. It is contemplated that this design will be completed within the next month in form to submit to contractors for bid proposals.

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A preliminary review has been made of the tentative specifications covering the alcohol distillery and of miscellaneous tanks and equipment to be installed in the Northern Regional Laboratory.

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The landscaping architect has devised planting plans for the building and utilities of the Bureau of Animal Industry at East Lansing, Michigan.

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FOOD RESEARCH

Dr. A. K. Balls returned in March from a six week's stay in Puerto Rico where he assisted the Agricultural Experiment Station at Mayaguez in its vanilla investigations. The growing of vanilla beans is a potentially important agricultural industry on the Island, particularly as it seems suitable for some of the coffee land that is now unprofitable. Dr. Balls directed work on enzyme investigations on the vanilla bean, which shows promise of improving the curing operations so as to produce a bean of higher aroma and market value.

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John T. Etchells of the Raleigh, N.C., field station of the Division attended the Pickle and Kraut Packers Conference in East Lansing, Mich., February 20 to 22. Three papers dealing with the pickle work of our station at Raleigh were presented at the meeting. After the meeting Mr. Etchells visited the Division in Washington where he discussed future plans for the work of the Raleigh Station.

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C. P. Wilson of the California Citrus Exchange, Los Angeles, visited the Food Research Division recently in connection with the new pectin plant which is being set up in Texas.

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Another visitor was Mr. Robert Rosenbaum of Philadelphia and Puerto Rico who discussed vanilla investigational work with Dr. Balls and Mr. Nelson.

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H. C. Diehl of the U. S. Frozen Pack Laboratory, Seattle, Wash., attended a meeting of the British Columbia Cannery Association in Vancouver, B.C., February 23 and 24. James A. Berry of the same laboratory attended a meeting of the Institute of Dairy Husbandry in Pullman, Wash., the latter part of February.

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The Division recently mentioned in The News Letter that Scientific Films, Inc., of Hollywood, had made a film showing the various steps in the processes developed by Dr. Chas. E. Sando and G. R. Fessenden for preserving agricultural specimens. The home office in Hollywood was so impressed with the results that it ordered its representative, Carl Berger, in charge of the Camera Department, to return to Washington and take more pictures of the specimens, featuring close-ups and using various lighting arrangements and fading effects. When the film is ready to be released it will be distributed by Paramount Studios.

In connection with this same line of work, Dr. Sando has added another exhibit to his already long list. There is now on display in the lobby of the Commerce Department building a plastics exhibit which will run through Easter Week. It is sponsored by the Chemical Division of the Bureau of Standards, Department of Commerce and by our Bureau with Dr. Sando's methacrylate-imbedded specimens representing the Bureau.

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Publications

- Flower Colors Preserved, by G. R. Fessenden. The Florists' Review, Vol. 85, No. 2206, p. 42, March 7, 1940.
- Types of Organisms Surviving in Commercially Pasteurized Citrus Juices in Florida. By Arthur J. Nolte, and Harry W. von Loesecke. Food Research, Vol. 5, No. 1, pp. 73-81, Jan.-Feb., 1940.
- Behavior of Microorganisms at Subfreezing Temperatures. I. Freezing Redistribution Studies. Vernon H. McFarlane. Food Research, Vol. 5, No. 1, pp. 43-57, 1940.
- Behavior of Microorganisms at Subfreezing Temperatures. II. Distribution and Survival of Microorganisms in Frozen Cider, Frozen Syrup-Packed Raspberries and Frozen Packed Peas. Vernon H. McFarlane, Food Research, Vol. 5, No. 1, pp. 59-68, 1940.
- Effects of Naringin and Hesperidin on Albino Rats. Robert H. Wilson, and Floyd DeEts. Food Research, Vol. 5, No. 1, pp. 89-92, 1940.
- Preparation, Properties and Thiocyanogen Absorption of Triolein and Trilinolein. D. H. Wheeler, R. W. Riemenschneider and Charles E. Sando. Jour. Biol. Chem. Vol. 132, No. 2, pp. 687-99, Feb. 1940.
- Effects of Continued Feeding of Diphenylene Oxide. John O. Thomas, Robert H. Wilson, and C. W. Eddy. Food Research, Vol. 5, No. 1, pp. 23-31, 1940.
- The Utilization of Fruits and Vegetables in the Rio Grande Valley. By J. L. Heid, ACE-30 (Mimeo.)
- Freezing Studies with New Bramble Varieties and Selections, 1937-1938 Progress Report. E. H. Wiegand, G. F. Waldo and H. C. Diehl. ACE-32 (Mimeo.)

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PROCESSING OF FARM PRODUCTS RESEARCH

Cotton Ginning Investigations:

On February 23, Charles E. Bennett delivered a paper entitled "Brief Comments on the Evolution of the Cotton Gin" before the Mississippi Academy of Science, which was meeting at the Robert E. Lee Hotel, Jackson, Miss.

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Numerous visitors have called at the U. S. Cotton Ginning Laboratory during the past month. Among these have been E. J. Hines and H. W. Kelley, from the Engineering Department of the Murray Company, Dallas; S. E. Wittel, Investment Investigator, Jackson, Miss. and others recorded on the visitors register.

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Some preliminary statistics derived from the survey of 90 cotton gins in the Yazoo-Mississippi Delta, as jointly cast up by the two cooperating Bureaus, showed that the over-all average power requirement per gin stand for brush-type gins was 23.8 horsepower as compared to 29.0 horsepower for air-blast gins.

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Cotton Packaging Investigations:

Between February 25 and March 5, Chas. A. Bennett made a trip to the factories of the principal ginning machinery manufacturers to confer with their engineers on cotton ginning and cotton pressing problems. F. L. Gerdes, of the cooperating Bureau, the Agricultural Marketing Service, joined him at Amite, La., and participated in the conferences at Houston, Dallas, Sherman and other points, returning to Stoneville on the night of March 5.

The tabulation of engineering data from previous tests is progressing satisfactorily. Much of this information has been useful in designing and drawing up of specifications for the experimental 500 pound bale press of nominal tied-out densities of 25 pounds per cubic foot, which is to be used in the coming year's tests.

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Fiber Flax Processing:

W. M. Hurst read a paper on fiber flax processing machinery at the West Coast section meeting of the A.S.A.E. held in Corvallis, Oreg. on February 16-17. Inspection trips made during the meeting included the Bureau's shop where several experimental machines are under construction. An experimental scutcher constructed in the shop was demonstrated.

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N. L. Wright, Scientific Liaison Office of the New Zealand Government, with office in London was a recent visitor at Corvallis. He has been instrumental in starting fiber flax work of a pilot plant nature in his country.

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Tow shakers designed by Bureau representatives which are in use at two of the cooperative flax plants continue to perform in a satisfactory manner.

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CHEMICAL ENGINEERING RESEARCH

On February 19 Dr. David J. Price addressed the students' assembly at Arlington Hall, Va. on the subject of dust explosions. In his address he made particular reference to the home economics aspects of the subject.

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As requested by the Washington representative of the National Grange, Dr. Price and Harry E. Roethe prepared an article on "Rural Fire Losses \$225,000,000 Yearly," for publication in an early issue of the National Grange Monthly. Mr. Roethe also wrote a second article "Watch That Hay - It May Ignite Spontaneously," for use in the same publication.

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An interesting piece of dust explosion research resulted from requests for information concerning the explosibility of dust that accumulates in chicken hatcheries. One large establishment in New Jersey sent samples of such dust to be tested for explosibility. It was found that the coarser scratchings do not create any explosion pressures, but the finer dusts, if thoroughly dry, produce low explosive pressures. Several inquiries along this line have been received recently from operators of large poultry farms and from their insurance representatives.

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A great deal of time and study have been given to the preparation of designs and specifications for the equipping of the Regional Research Laboratories. A number of contractors will meet with representatives of the Department on March 21, for consideration of this important phase of the laboratory construction.

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Publications

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CHANGES IN PERSONNEL

Recent Appointments - Indefinite or Probationary

Felix Berger	Asst. Messenger	Business Adminis.
Gail C. Kuhn	Asst. Investigator	" "
	(Classification)	
Mrs. Evelyn C. Morton(wae) Jr.	Clerk-Steno.	
	(San Francisco, Calif)	Food Research
Frances D. Barker	Asst. Clerk-Steno	
	(Urbana, Ill.)	Indus. Farm Prod.
Anthony P. Kiskunas	Minor Scien. Helper	
	(Urbana, Ill.)	" " "
Jack H. Veal	Under Scien Helper	
	(Urbana, Ill.)	" " "
Mrs. Lillian D. McCormack	Asst. Clerk-Steno.	Plans and Service
Louise W. Zerwekh	Jr. Clerk-Steno (Peoria,	
	Ill.)	Reg. Res. Lab. (Northern)
Paul D. V. Manning	Princ. Chem. Engr.	
	(San Francisco, Calif.)	" " " (Western)

Recent Appointments - Temporary

Louise Helen Steiner	Asst. Clerk-Steno.	Business Adminis.
Helen B. Kramer	" " "	Carbohydrate Res.
Mrs. Martha F. Sipes	Jr. Clerk-Typist	Indus. Farm Prod.
F. Carl Weigelt	Asst. Architect (Detailed	
	to Reg. Res. Lab.)	Plans and Service
Shirley A. Yauchler	Jr. Stenographer	Reg. Res. Lab. (Admin.)

Separations

Shirley Schwartz	Asst. Clerk-Steno (Resigned)	Business Adminis.
Clifford H. Billett	Sr. Photographer (Stoneville,	
	Miss.)	Cotton Ginning Inves.
Ernest Edwin Diehl	Skilled Laborer (Ames, Ia.)	Farm Mech. Equip.
William A. Dennin	Draftsman (Trans. to	
	Bu. of Plant Indus.)	Farm Struc. Research
William E. Kennel	Under Scien' Helper	
	(Urbana, Ill.) (Resigned)	Indus. Farm Prod,
Mrs. Mary B. Moore	Senior Steno.	Reg. Res. Lab. (Admin.)
Mrs. Mary Ellen O'Malley	Asst. Clerk-Steno.	" " " "
Angela Josephine Murray	Asst. Clerk-Steno.	" " " "
Mrs. Christine G. LeCourt.	Jr. Steno.	
	(New Orleans, La.)	" " " (Southern)

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